

5th World Conference on Educational Sciences - WCES 2013

The relationship between personality types and self-efficacy perceptions of student teachers

Fatih Güngör ^{a*}, Hakan Kurt ^b, Gülay Ekici ^c^a *Afyon Kocatepe University, Faculty of Education, Afyonkarahisar and 03200, Turkey*^b *Necmettin Erbakan University, Ahmet Keleşoğlu Education Faculty, Konya and 42090, Turkey*^c *Gazi University, Gazi Education Faculty, Ankara and 06500, Turkey*

Abstract

This study aims to analyze the relationship between personality types and self-efficacy perceptions of student teachers. To collect the data, teacher sense of efficacy scale and The Keirsey Temperament Sorter-II were used. The Cronbach's Alpha coefficients were computed as 0.940 and 0.762 respectively for these scales. In addition to descriptive statistics, chi-square test and Pearson correlation coefficient were used to analyze the data. According to the results of the study, self-efficacy perceptions of student teachers were found high. In terms of personality types, most of the student teachers were found to be guardians and this personality type was followed by idealists, artisans and rationals respectively in this study. The student teachers, being guardians, had higher levels of self-efficacy perceptions than other personality types. The results also indicated that there are positive moderate and high levels of relationships between personality types and self-efficacy perceptions of student teachers.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](#).

Selection and/or peer-review under responsibility of Academic World Education and Research Center.

Keywords: teachers' sense of efficacy, David Keirsey, personality types, factors affecting teacher qualifications

1. Introduction

Personality traits certainly have a great effect on teaching profession. Teachers need to have such personal traits required for teaching that they should be model for students. Otherwise, teachers might mitigate existing skills of students (Yazıcı, 2006). In this sense, student teachers are required to evaluate if teaching profession match with their personality traits. Student teachers whose personality traits match with their personality improve themselves in terms of qualifications of teaching profession.

According to Lawrence (1993), personality refers to the patterns of behaviors consistently exhibited by an individual. It can be said that Carl Jung's personality theory gave a start for the studies about personality types and

*Corresponding FatihGüngör. Tel.: +90-272-228-1326/356

E-mail address: fgungor@aku.edu.tr

models. Myers and Briggs (1962 and 1975) implemented Jung's ideas, and developed personality type indicator to assess personality types. In this sense, personality type indicator has been put into action with many studies (Guild & Garger, 1998; Myers & Myers, 1997; Saban, 2000; Silver & Hanson, 1998; Silver, Strong & Perini, 2000). Following these personality theories, David Keirsey developed another theory about personality types and this theory was a basis for the book *Please Understand Me II* (Keirsey, 1998). Keirsey (1998) argues that people are different from each other and there is no reason to change them. According to him, the differences are not bad but good, and people need to be embraced as they are. The four temperaments Keirsey (Keirsey & Bates, 1984) identified are as follow;

1. Spontaneous and realistic artisans: They are excitable, active, risk-taking people, and they need to be encouraged by others.
2. Responsible and normative guardians: They are responsible, realistic, determined, normative, protective, helpful and loyal individuals.
3. Pragmatic and logical rationals: They are quiet, even-tempered, independent, curious, and they tend to be scientists as self-contained and skeptical people.
4. Kindhearted and diplomatic idealists: They do not like to be criticized, but they are able to understand emotions as emotional people. They are also successful individuals in terms of academic life.

These personality traits have a deep effect on teacher qualifications. Affective behaviors are one of the most important behavior types, and teachers' sense of efficacy is vital within this context. Teachers' sense of efficacy refers to the judgments or beliefs regarding their ability to accomplish critical instructional tasks (Aston, 1984; Brouwers & Tomic, 2003; Guskey & Passaro, 1994; Tschannen-Moran & Hoy, 2001). In this sense, individuals' personal traits are emphasized to be directly related to teachers' sense of efficacy. Students are affected by personality traits in terms of their behaviors. Furthermore, there could be found such studies implying positive relationships between highly qualified behaviors of students, and high self-efficacy perception, in-class instructional activities, personality traits (Anthony & Kritsonis, 2007; Chambers, Henson & Sienty 2001; DeNovellis & Lawrence, 1983; Henson & Chambers, 2002; Ruebel, 1999; Safferry, 1998; Sewell & St-George, 2000; Usher & Pajares, 2006; Wollfolk & Hoy, 1990). In the field, there are some studies trying to define personality traits of teachers and student teachers (Ball, 2000; Ball, 2001; Ditiherio, 1996; Kasap, 2006). However, no study could be found analyzing the relationship between personality types and teachers' sense of efficacy by using Keirsey Temperaments Sorter-II. In this respect, this study might shed a light into the field.

2. The aim of the study

In this study, it is aimed to evaluate the relationship between personality types and teachers' sense of efficacy for student teachers. Within this context, the following questions were posed and investigated in this study;

- 1- What are the personality types of student teachers?
- 2- What are the beliefs of student teachers about teachers' sense of efficacy?
- 3- Do self-efficacy perception levels differ by personality types of student teachers?
- 4- Is there any correlation between personality types and self-efficacy perceptions of student teachers?

3. Methodology

In this study, screening model was used. Screening model is a research design aiming to identify, describe and explain a past or current situation, cases, groups, objects and their characteristics (Ekiz, 2003; Karasar, 2006).

3.1. Participants

The study group was comprised of 295 student teachers studying in different departments of Technical Education Faculty of Gazi University in 2011-2012 academic year. 74 (%25.1) of student teachers were female and 221 (%74.9) were male.

3.2. Instruments

To collect the data, Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and Keirsey Temperament Sorter-II (Keirsey, 1998) were used.

Teachers' Sense of Efficacy Scale; was adapted into Turkish by Çapa, Çakıroğlu and Sarıkaya (2005). The 9 point likert type scale consists of 24 items. For this study, the Cronbach's alpha reliability was computed as .940.

The Keirsey Temperament Sorter-II; was adapted into Turkish with validity and reliability studies. The scale consists of 70 items having two-choice questions for four temperaments of guardians, idealists, artisans and rationalists. The Cronbach's alpha reliability was found as .762 in this study (Keirsey, 1998; Ekici, 2003).

3.3. Data Analysis

In addition to descriptive statistics, chi-square test and Pearson's correlation coefficient were applied in this study.

4. Results

4.1. Research question 1

The table 1 indicates there are 98 guardians (%33.2), 86 idealists (%29.2), 68 artisans (%23.1) and 43 rationalists (%14.6). To analyze if the difference is significant, chi-square goodness-of-fit test was applied. According to the results of chi-squared test, there is a statistically significant difference between personality types [$\chi^2_{(3)} = 11.254$, $p < .05$].

Table 1. The results of the descriptive statistics and chi-square test about the personality types of student teachers

Temperaments	N	%	Mean	SD	Minimum	Maximum
Guardians	98	33,2	8,2	2,125	4,0	10,0
Idealists	86	29,2	5,2	1,258	3,0	8,0
Artisans	68	23,1	5,1	2,342	2,0	8,0
Rationalists	43	14,6	4,6	3,153	1,0	9,0
Total	295	100,0				

$\chi^2 = 11,254$ $sd=3$ $p=.000$

4.2. Research question2

Regarding the second research question, the results were given in Table 2 about the distribution of teachers' sense of efficacy levels. According to the table, teachers' sense of efficacy level is $X=162.89$ and this level is situated around 7 in 9 point likert type scale. This mean indicates high self-efficacy perception levels of student teachers. The results were similar for sub scales of teachers' sense of efficacy scale, as well.

Table 2. The results about the effect of gender on teachers' sense of efficacy, self-efficacy perception regarding teaching process, and responsibility perception

The scale and its sub scales	N	Mean	SD	Minimum	Maximum
Overall scale	295	162,89	24,32	81,00	216,00
Efficacy in student engagement	295	53,14	8,90	16,00	72,00
Efficacy in instructional strategies	295	54,70	8,33	21,00	72,00
Efficacy in classroom management	295	54,99	9,32	22,00	72,00

4.3. Research Question 3

According to the results in Table 3, there is no student teacher having low sense of efficacy. When the distribution of self-efficacy levels were analyzed in terms of personality types, the percentage of guardians, idealists, artisans and rationalists showing moderate self-efficacy perception were %37.5, %34.14, %19.64 and %10.71 respectively. On the other hand, the percentage of guardians, idealists, artisans and rationalists showing high self-

efficacy perception were %32.2, %28.45, %23.84 and %15.48 respectively. Considering variable of teachers' sense of efficacy, a statistically significant difference was extrapolated in personality types as a result of chi-square test [$X^2_{(3)} = 1,649$, $p < .05$]. It was also determined that the number of guardians is the highest for both moderate and high teachers' sense of efficacy.

Table 3. The distribution of teachers' sense of efficacy in terms of personality types

Self-efficacy		Temperaments				Total
		Guardians	Idealists	Artisans	Rationalists	
Low level*	N	-	-	-	-	-
	%	-	-	-	-	-
Moderate level	N	21	18	11	6	56
	%	37,5	34,14	19,64	10,71	100,0
High level	N	77	68	57	37	239
	%	32,21	28,45	23,84	15,48	100,0
Total	N	98	86	68	43	295
	%	33,22	29,15	23,05	14,57	100,0

$X^2=1.649$ $sd=3$ $p=.000$

*As there was no student teacher showing low teachers' sense of efficacy, the values were assessed in terms of student teachers showing moderate and high self-efficacy perception.

4.4. Research Question 4

As seen in Table 4, there could be found low, moderate and high correlations between teachers' sense of efficacy and personality types for student teachers. In this sense, there are positive and high correlations between teachers' sense of efficacy, and guardians, idealists and artisans ($r=0.872$, $r=0.759$ and $r=0.720$, $p<0.01$). Furthermore, there are positive, moderate and low correlations between sub scales of teachers' sense of efficacy scale and four temperaments (vary between $r=0.156$ and $r=0.386$, $p<0.01$).

Table 4. The correlations between teachers' sense of efficacy and personality types

		The overall of teachers' sense of efficacy scale	Student engagement	Instructional strategies	Classroom management
Guardians	r	,872(**)	-	,189(**)	,371(**)
Idealists	r	,759(**)	,344(*)	,164(**)	,156(**)
Artisans	r	,720(**)	,375(**)	,185(**)	,217(**)
Rationalists	r	-	,386(**)	-	-

** $p < 0.01$, r: Pearson's Correlation Coefficient

5. Conclusion and Discussion

It is certain that qualifications of students are closely related to qualifications of teachers. Teachers have an effect on personality traits of students. Personality traits of teachers also affect both their own professional qualifications, and students. In this sense, teachers' sense of efficacy is under the effect of personality traits, especially in affective domain. Therefore, it is aimed to define the relationship between teachers' sense of efficacy and personality traits in this study, and the results were of vital importance.

The student teachers participating in the study were mostly guardians followed by idealists, artisans and rationalists. Furthermore, student teachers' sense of efficacy was determined to be high. There could be found different results about self-efficacy perception. However, teachers' sense of efficacy was found to be moderate in most studies (Ekici, Atik, Gökmen, Altunsoy & Çimen; 2010; Üstüner, Demirtaş, Cömert & Özer, 2009). According to the result of this study, teachers being guardians and high teachers' sense of efficacy support each other as it can be suggested teachers being responsible, rationalist, decisive, consistent, protective, helpful and reliable will be successful at teaching profession.

Considering four temperaments, teachers being guardians have higher teachers' sense of efficacy than other personality types. This can be evaluated as guardians are fond of teaching profession, and they study at the

education faculty willingly. Furthermore, there could be found low, moderate and high correlations between teachers' sense of efficacy and personality types for student teachers. It was also important to find positive and high relationship between teachers' sense of efficacy scale and the personality types of guardians, idealists and artisans. Henson and Chambers (2002) suggested there is a low correlation between personality types and self-efficacy.

To conclude, personality types of teachers is one the factors having an effect on personal traits of students. Therefore, there is a need to determine if student teachers have adequate personality traits to become a teacher, and provide training for them to gain effective behaviors. Some qualitative studies might also be carried out to define the relationship between personality types of student teachers and teachers' sense of efficacy.

References

- Athoğlu, Y. (1998). Eğitimi araştırma ve geliştirme dairesi başkanlığının 21.Yüzyıla girerken Türk Eğitim sisteminin ihtiyaç duyduğu "Çağdaş Öğretmen Profili" araştırması. *Bilgi Çağında Öğretmenimiz Sempozyumu*, 8-9 October 1998 (ANAÇEV yayımları), 130-138.
- Ball, I. L. (2000). Primary teachers and secondary teachers: alike or different types? A look at data from the MBTI Australian data archive. *Australian Psychological Type Review*, 2 (3), 13-14.
- Ball, I. L. (2001). Gender differences in the distribution of types in Australia: men are from marble bar; women are from Venus bay. *Australian Psychological Type Review*, 3, 13-14.
- Chambers, S. M., Henson, R. K., & Sienty, S. F. (2001). Personality types and teaching efficacy as predictors of classroom control orientation in beginning teachers. *Paper presented at the annual meeting of the Southwest Educational Research Association* (24th, New Orleans, LA, February 1-3, 2001).
- DeNovellis, R., & Lawrence, G. (1983). Correlates of teacher personality variables (Myers-Briggs) and classroom observation data. *Research in Psychological Type*, 6, 37-46.
- Ditiberio, J. K. (1996). Education, learning styles, and cognitive styles, in A. L. Hammer (Ed.). *MBTI Applications: A decade of research on the Myers-Briggs Type Indicator*, 123-166. Palo Alto: Consulting Psychologists Press.
- Ekici, G. (2003). *Öğrenme stiline dayalı öğretim ve biyoloji dersi öğretimine yönelik ders planı örnekleri*. Ankara: Gazi Kitabevi.
- Ekici, G., Atık, A. D., Gökmen, A., Altunsoy, S., & Çimen, O. (2010). An assessment of the relationship between teacher candidates' levels of teacher self-efficacy and levels of their attitudes and beliefs on classroom control. *Uluslararası Öğretmen Yetiştirme Politikaları ve Sorunları Sempozyumu II*, 1196-1204. Ankara: Hacettepe Üniversitesi Bakü-Azerbaycan ve Azerbaycan Devlet Pedagoji Üniversitesi.
- Ekiz, D. (2003). *Eğitimde araştırma yöntem ve metotlarına giriş*. Ankara: Anı Yayıncılık.
- Guild, P.B., & Garger, S. (1998). *Marching to different drummers* (2nd edition). Alexandria, USA: ASCD.
- Henson, R. K. & Chambers, S. M. (2002). Personality type as a predictor of teaching efficacy and classroom control beliefs in emergency certification teachers. *Paper presented at the annual meeting of the southwest educational research association*, Austin, TX, February, 14-16 2002.
- Lawrence, P. A. (1993). *Personality: Theory and research*. Singapore: John Wiley.
- Karasar, N. (2006). *Bilimsel araştırma yöntemi*. Ankara: Sanem Matbaacılık San ve Tic. A.Ş.
- Kasap, T. B. (2006). Keirse/Golay öğrenme modelleri ve karakter tipleri teorilerinin piyano eğitimine uygulanması. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 7 (12), 113-124.
- Keirse, D., & Bates, M. (1984). *Please understand me: Character and temperament types*. Del Mar, CA: Prometheus Nemesis Book Co. Inc.
- Keirse, D. (1998). *Please Understand Me II: Temperament Character Intelligence by David Keirse*. Del Mar, CA: Prometheus Nemesis Book Company.
- Myers, I. B., & Myers, P. B. (1997). *Kişilik "Farklı tipler farklı yetenekler"*. (Hüsnü Ovacık, Trans.). İstanbul: Kuraldışı Yayınları, Çizge Matbaacılık Ltd. Şti.
- Ruebel, K. K. (1999). *Preservice teacher attributes as indicators of performance in a middle level education course*. Unpublished doctorate thesis, Indiana State University.
- Saban, A. (2000). *Öğrenme öğretme süreci "Yeni teori ve yaklaşımlar"*. Ankara: Nobel Yayın Dağıtım Ltd. Şti.
- Saffery, L. F. K. (1998). *Relationship of temperament type to elementary regular education teachers' implementation of inclusive practices*. Unpublished doctorate thesis, Seattle University.
- Silver, H. R., & Hanson, R. (1996). *Learning Styles & Strategies* (3rd Edition). USA: Silver Strong & Associates, Inc.
- Silver, H., Strong, R., & Perini, M. (2000). *So each may learn*. Alexandria, USA: ASCD.
- Ünal, S. (1991). Eğitim ve öğretmenin niteliğinin geliştirilmesinde öğretmenin rolü. *Eğitimde Nitelik Geliştirme/Eğitimde Arayışlar I. Sempozyumu*, 13-14 April 1991. Kültür Koleji Yayını: 1, 236.
- Üstüner, M., Demirtaş, H., & Cömert, M. (2009). The attitudes of prospective teachers towards the profession of teaching. (The case of İnönü University Faculty of Education). *Education and Science*, 34 (151), 140-155.
- Yazıcı, K. (2006). Değerler eğitimine genel bir bakış. *Türklük Bilimi Araştırmaları*, 19, 499-522.